

CLAIMS

What is claimed is:

1. A method for managing a digital certificate within a data processing system, the method comprising:
receiving a certificate revocation list; and
in response to receiving the certificate revocation list, automatically requesting removal of the digital certificate from a certificate repository.

2. The method of claim 1 further comprising:
extracting a certificate serial number from the certificate revocation list, wherein the certificate serial number has been associated with the digital certificate by the certifying authority; and
requesting removal of the digital certificate from the certificate repository using the certificate serial number of the digital certificate.

3. The method of claim 1 further comprising:
receiving a certificate revocation list announcement message; and
extracting the certificate revocation list from the certificate revocation list announcement message.

4. The method of claim 1 wherein the digital certificate and the certificate revocation list are formatted according to X.509 standards.

5. The method of claim 1 wherein the certificate repository is an LDAP (Lightweight Directory Access Protocol) directory.

- 5 6. The method of claim 1 wherein a registration authority receives the certificate revocation list and generates a certificate removal request.

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7. A method for managing a digital certificate within a data processing system, the method comprising:

receiving a certificate revocation list, wherein the certificate revocation list identifies at least one
5 digital certificate that has been revoked by a certifying authority;

extracting a certificate serial number from the certificate revocation list, wherein the certificate serial number uniquely corresponds to a digital
10 certificate; and

in response to receiving the certificate revocation list, automatically requesting removal of the digital certificate from an LDAP (Lightweight Directory Access Protocol) directory using the extracted certificate
15 serial number.

8. The method of claim 7 further comprising:

receiving a certificate revocation list announcement message; and

20 extracting the certificate revocation list from the certificate revocation list announcement message.

9. The method of claim 7 wherein the digital certificate and the certificate revocation list are
25 formatted according to X.509 standards.

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10. An apparatus for managing a digital certificate, the apparatus comprising:

means for receiving a certificate revocation list;
and

5 means for automatically requesting removal of the digital certificate from a certificate repository in response to receiving the certificate revocation list.

11. The apparatus of claim 10 further comprising:

10 means for extracting a certificate serial number from the certificate revocation list, wherein the certificate serial number has been associated with the digital certificate by the certifying authority; and

15 means for requesting removal of the digital certificate from the certificate repository using the certificate serial number of the digital certificate.

12. The apparatus of claim 10 further comprising:

20 means for receiving a certificate revocation list announcement message; and

means for extracting the certificate revocation list from the certificate revocation list announcement message.

25 13. The apparatus of claim 10 wherein the digital certificate and the certificate revocation list are formatted according to X.509 standards.

30 14. The apparatus of claim 10 wherein the certificate repository is an LDAP (Lightweight Directory Access Protocol) directory.

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15. The apparatus of claim 10 wherein a registration authority receives the certificate revocation list and generates a certificate removal request.

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16. An apparatus for managing a digital certificate, the apparatus comprising:

means for receiving a certificate revocation list, wherein the certificate revocation list identifies at least one digital certificate that has been revoked by a certifying authority;

means for extracting a certificate serial number from the certificate revocation list, wherein the certificate serial number uniquely corresponds to a digital certificate; and

means for automatically requesting removal of the digital certificate from an LDAP (Lightweight Directory Access Protocol) directory using the extracted certificate serial number in response to receiving the certificate revocation list.

17. The apparatus of claim 16 further comprising:

means for receiving a certificate revocation list announcement message; and

means for extracting the certificate revocation list from the certificate revocation list announcement message.

18. The apparatus of claim 16 wherein the digital certificate and the certificate revocation list are formatted according to X.509 standards.

19. A computer program product on a computer readable medium for use in a data processing system for managing a digital certificate, the computer program product comprising:

5 instructions for receiving a certificate revocation list, wherein the certificate revocation list identifies at least one digital certificate that has been revoked by a certifying authority;

10 instructions for extracting a certificate serial number from the certificate revocation list, wherein the certificate serial number uniquely corresponds to a digital certificate; and

15 instructions for automatically requesting removal of the digital certificate from an LDAP (Lightweight Directory Access Protocol) directory using the extracted certificate serial number in response to receiving the certificate revocation list.

20 20. The computer program product of claim 19 further comprising:

instructions for receiving a certificate revocation list announcement message; and

25 instructions for extracting the certificate revocation list from the certificate revocation list announcement message.

21. The computer program product of claim 19 wherein the digital certificate and the certificate revocation list are formatted according to X.509 standards.

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